

WHAT IS CLAIMED IS:

Computer-implemented method for managing information relating to processing of polymer probe arrays, said method comprising the steps of:

creating an electronically-stored experiment table, said experiment table storing a record for an experiment, said experiment record comprising:

a first identifier identifying a target sample applied to a polymer probe array chip in said experiment;

a second identifier identifying said polymer probe array chip to which said target sample was applied in said experiment; and

creating an electronically-stored chip table, said chip table storing a record for said polymer probe array chip, said chip record comprising:

chip; and
said second identifier identifying said polymer probe array

a third identifier specifying a layout of polymer probes on said polymer probe array chip.

2. The method of claim A1 further comprising the step of:

performing an experiment wherein said target sample is applied to said polymer probe array chip.

3. The method of claim A1 further comprising the steps of:

creating an electronically-stored target table, said target table storing a record for said target sample, said target sample record comprising:

said first identifier identifying said target sample; and

a fourth identifier specifying parameters of preparation of said target sample.

4. The method of claim A1 wherein said polymer probe array chip comprises an oligonucleotide array chip.

1 5. A computer-implemented method for managing information
2 relating to processing of oligonucleotide probe arrays, said method comprising the
3 steps of:

4 creating an electronically stored analysis table, said analysis table
5 listing for each of a plurality of expression analysis operations:

6 a first identifier specifying a particular analysis operation

7 a second identifier specifying oligonucleotide array

8 processing result information on which said particular expression analysis
9 operation has been performed; and

10 creating an electronically stored gene expression result table, said
11 gene expression result table listing for each of selected ones of said plurality of
12 analysis operations, a list of genes or expressed sequence tags and results of said
13 particular expression analysis operation as applied to each of said genes or
14 expressed sequence tags.

1 6. A computer-implemented method for managing information
2 relating to processing of polymer probe arrays, said method comprising the steps
3 of:

4 storing in an electronically-stored experiment table for each of a
5 plurality of experiments, a first identifier identifying a target sample applied to an
6 polymer probe array chip in a particular experiment;

7 storing in said electronically-stored experiment table for each of said
8 plurality of experiments a second identifier identifying said polymer probe array
9 chip to which said target sample was applied in said particular experiment;

10 storing in an electronically-stored chip table for each of a plurality
11 of polymer probe array chips, said second identifier identifying a particular
12 polymer probe array chip; and

13 storing in said electronically-stored chip table for each of said
14 plurality of polymer probe arrays chips a third identifier specifying a layout of
15 polymer probes on said polymer probe array chip.

1 6. 7. The method of claim ~~6~~⁵ further comprising the steps of:

2 storing in an electronically-stored target table, for each of a plurality
3 of target samples, said first identifier identifying a particular target sample; and
4 storing in said electronically-stored target table, for each of said
5 plurality of target samples, a fourth identifier specifying parameters of preparation
6 of said particular target sample.

1 7. 8. The method of claim ~~6~~⁵ wherein said polymer probe array
2 chip comprises an oligonucleotide array chip.

1 ~~5~~ ~~8~~ 9. A computer-readable storage medium having stored thereon:
2 code for creating an electronically-stored experiment table, said
3 experiment table listing for each of a plurality of experiments:
4 a first identifier identifying a target sample applied to an
5 oligonucleotide array chip in a particular experiment;
6 a second identifier identifying said oligonucleotide array chip to
7 which said target sample was applied in said particular experiment; and
8 code for creating an electronically-stored chip table, said chip table
9 listing for each of a plurality of oligonucleotide array chips:
10 said second identifier identifying said particular
11 oligonucleotide array chip; and
12 a third identifier specifying a layout of oligonucleotide
13 probes on said particular oligonucleotide array chip.

1 7. 10. The computer-readable storage medium of claim ~~9~~⁸ having
2 further stored thereon:
3 code for creating an electronically-stored target table, said target
4 table listing records comprising:
5 said first identifier identifying said target sample for one or
6 more of said plurality of experiments; and
7 a fourth identifier specifying parameters of preparation of
8 said target sample for one or more of said plurality of experiments.

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11. A computer-readable storage medium having stored thereon:
an electronically-stored experiment table, said experiment table
listing for each of a plurality of experiments:
a first identifier identifying a target sample applied to an
oligonucleotide array chip in a particular experiment;
a second identifier identifying said oligonucleotide array chip to
which said target sample was applied in said particular experiment; and
an electronically-stored chip table, said chip table listing for each of
a plurality of oligonucleotide array chips:
said second identifier identifying a particular oligonucleotide
array chip; and
a third identifier specifying a layout of oligonucleotide
probes on said particular oligonucleotide array chip.

12. A computer-readable storage medium for managing information relating to processing of oligonucleotide arrays, said storage medium having stored thereon:

code for creating an electronically stored analysis table, said analysis table listing for each of a plurality of expression analysis operations:

a first identifier specifying a particular analysis operation

a second identifier specifying oligonucleotide array processing result information on which said particular expression analysis operation has been performed; and

code for creating an electronically stored gene expression result table, said gene expression result table listing for each of selected ones of said plurality of analysis operations, a list of genes and results of said particular expression analysis operation as applied to each of said genes.

13. A computer readable storage medium having stored thereon an analysis table, said analysis table listing for each of a plurality of expression analysis operations:

- a first identifier specifying a particular analysis operation
- a second identifier specifying oligonucleotide array processing result information on which said particular expression analysis operation has been performed; and
- a gene expression result table, said gene expression result table listing for each of selected ones of said plurality of analysis operations, a list of genes and results of said particular expression analysis operation as applied to each of said genes.

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